

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Jason M. English, et al. Art Unit 1772
Serial No. 10/719,613
Filed November 21, 2003
Confirmation No. 3131
For LABIAL PAD
Examiner: Michael Bogart

AMENDED APPEAL BRIEF

Richard L. Bridge, Reg. No. 40,529
SENNIGER POWERS
One Metropolitan Square, 16th Floor
St. Louis, Missouri 63102
(314) 231-5400

TABLE OF CONTENTS

I.	REAL PARTY IN INTEREST	1
II.	RELATED APPEALS AND INTERFERENCES	1
III.	STATUS OF CLAIMS	2
IV.	STATUS OF AMENDMENTS	2
V.	SUMMARY OF CLAIMED SUBJECT MATTER	2
VI.	GROUND OF REJECTION TO BE REVIEWED ON APPEAL	4
VII.	ARGUMENT	5
	1. Claims 24, 25, 28-33, 36-41, 44-48, 51-55 and 60-63 are non-obvious in view of and patentable over Bewick-Sonntag et al. (US 2003/0191442) in combination with Dulle (US 3,856,013), Zelazoski et al. (US 5,536,555) and Brandt et al. (US Re. 32,649)	
	Claim 24	5
	Claim 41	13
	2. Claims 1, 3, 4, 6-16, 18-23, 34, 35, 49, 50 and 56-59 are non-obvious in view of and patentable over Bewick-Sonntag et al. (US 2003/0191442) in combination with Dulle (US 3,856,013), Zelazoski et al. (US 5,536,555) and Brandt et al. (US Re. 32,649) and further in combination with Bewick-Sonntag et al. (US 5,836,929)	
	Claim 1	15
VIII.	CONCLUSION	20
	CLAIMS APPENDIX	21
	EVIDENCE APPENDIX	34
	RELATED PROCEEDINGS APPENDIX	35

TABLE OF AUTHORITIES

<i>In re Gordon</i> , 221 USPQ 1125 (Fed. Cir. 1994).....	8
<i>In re Ratti</i> , 123 USPQ 349 (CCPA 1959).....	8
MPEP 2143.01(V and VI).....	8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of Jason M. English, et al. Art Unit 1772
Serial No. 10/719,613
Filed November 21, 2003
Confirmation No. 3131
For LABIAL PAD
Examiner: Michael Bogart

July 23, 2007

AMENDED APPEAL BRIEF

This is an appeal from the rejection of the claims of the above-referenced application made in the final Office action dated January 12, 2007 and subsequent Advisory action dated March 28, 2007. A Notice of Appeal was filed on April 12, 2007.

This Amended Appeal Brief is being submitted in response to the Notification of Non-Complaint Appeal Brief dated July 16, 2007.

I. REAL PARTY IN INTEREST

The real party in interest in connection with the present appeal is Kimberly-Clark Worldwide, Inc. of 401 N. Lake Street, Neenah, Wisconsin 54957-0349, a corporation of the state of Delaware, owner of a 100 percent interest in the pending application.

II. RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any pending appeals or interferences which may be related to, directly affect or be directly affected by, or have a bearing on, the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1, 3, 4, 6-16, 18-25, 28-41 and 44-63 are currently pending in the application for consideration. Claims 2, 5, 17, 26, 27, 42, and 43 were previously cancelled. A copy of the claims involved in this appeal appears in the Claims Appendix of this Brief.

Claims 24, 25, 28-33, 36-41, 44-48, 51-55 and 60-63 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bewick-Sonntag et al. (US 2003/0191442) in view of Dulle (US 3,856,013), Zelazoski et al. (US 5,536,555) and Brandt et al. (US Re. 32,649).

Claims 1, 3, 4, 6-16, 18-23, 34, 35, 49, 50 and 56-59 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bewick-Sonntag et al., Dulle, Zelazoski et. al. and Brandt et al. and further in view of Bewick-Sonntag et al. (US 5,836,929).

The rejections of claims 1, 3, 4, 6-16, 18-25, 28-41 and 44-63 are being appealed.

IV. STATUS OF AMENDMENTS

No amendments have been filed after the rejection from which this appeal is taken (i.e., the Office action dated December 13, 2006).

V. SUMMARY OF CLAIMED SUBJECT MATTER

The following summary correlates claim elements to specific embodiments described in the application specification, but does not in any manner limit claim interpretation. Rather, the following summary is provided only to facilitate the Board's understanding of the subject matter of this appeal.

With reference to the present specification and drawings, claim 1 is directed to an absorbent article 20 for disposition at least partially within the vestibule 22 of a female wearer.

See page 5, line 30 through page 6, line 4 and Fig. 1B. The absorbent article 20 comprises a liquid permeable liner 42 adapted for contiguous relationship with the wearer, an outer cover 44 in generally superposed relationship with the liner, and an absorbent structure 46 formed separate from the liner and the outer cover and being disposed therebetween. See page 7, line 31 through page 8, line 8 and Fig. 3. The absorbent structure 46 is sized and configured for insertion at least partially within the vestibule 22 of the female wearer, and is constructed at least in part of hydrophilic fibers and superabsorbent material. See page 17, lines 25-27. A concentration of the superabsorbent material in the absorbent structure 46 is in the range of about 5 weight percent to about 35 weight percent. See page 21, lines 8-12. The superabsorbent material also has a gel stiffness index of at least about 0.5. See page 19, lines 30-32. The absorbent structure further has a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test of at least about 15 grams/gram, a retention capacity as determined by the Saturation Capacity and Retention Capacity Test of at least about 3 grams/gram, and an intake time for a first insult of the absorbent structure 46 as determined by an Intake and Rewet Test of no more than about 30 seconds. See page 23, lines 9-24 and claim 1.

Claim 24 is directed to an absorbent article 20 for disposition at least partially within the vestibule 22 of a female wearer. See page 5, line 30 through page 6, line 4 and Fig. 1B. The absorbent article 20 comprises an absorbent structure 46 sized and configured for insertion at least partially within the vestibule 22 of the female wearer. See page 5, line 33 through page 6, line 4 and Fig. 1B. The absorbent structure 46 comprises in the range of about 5 weight percent to about 15 weight percent superabsorbent material. See

page 21, lines 8-16. The absorbent structure 46 also has a basis weight in the range of about 150 to about 400 grams per square meter and a density in the range of about 0.05 to about 0.13 grams per cubic centimeter. See page 21, lines 28-33. The absorbent structure 46 further has a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test of at least about 15 grams/gram and a retention capacity as determined by said Saturation Capacity and Retention Capacity Test of at least about 3 grams/gram. See page 23, lines 9-17.

Claim 41 is directed to an absorbent article 20 for disposition at least partially within the vestibule 22 of a female wearer. See page 5, line 30 through page 6, line 4 and Fig. 1B. The absorbent article 20 comprises an absorbent structure 46 sized and configured for insertion at least partially within the vestibule 22 of the female wearer. See page 5, line 33 through page 6, line 4 and Fig. 1B. The absorbent structure 46 comprises in the range of about 5 weight percent to about 35 weight percent superabsorbent material. See page 21, lines 8-12. The absorbent structure 46 also has a basis weight in the range of about 150 to about 400 grams per square meter and a density in the range of about 0.05 to about 0.13 grams per cubic centimeter. See page 21, lines 28-33. The absorbent structure 46 further has an intake time for a first insult of the absorbent structure as determined by an Intake and Rewet Test of no more than about 30 seconds. See page 23, lines 9-24 and claim 41.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Appellants appeal the rejections of claims 24, 25, 28-33, 36-41, 44-48, 51-55 and 60-63 under 35 U.S.C. §103(a) as being unpatentable over Bewick-Sonntag et al. (US 2003/0191442)

in view of Dulle (US 3,856,013), Zelazoski et al. (US 5,536,555) and Brandt et al. (US Re. 32,649).

B. Appellants appeal the rejections of claims 1, 3, 4, 6-16, 18-23, 34, 35, 49, 50 and 56-59 under 35 U.S.C. §103(a) as being unpatentable over Bewick-Sonntag et al., Dulle, Zelazoski et al. and Brandt et al. and further in view of Bewick-Sonntag et al. (US 5,836,929).

VII. ARGUMENT

1. Claims 24, 25, 28-33, 36-41, 44-48, 51-55 and 60-63 are non-obvious in view of and patentable over Bewick-Sonntag et al. (US 2003/0191442) in combination with Dulle (US 3,856,013), Zelazoski et al. (US 5,536,555) and Brandt et al. (US Re. 32,649).

Claim 24

Claim 24 is directed to an absorbent article for disposition at least partially within the vestibule of a female wearer. The absorbent article comprises:

an absorbent structure sized and configured for insertion at least partially within the vestibule of the female wearer, said absorbent structure comprising in the range of about 5 weight percent to about 15 weight percent superabsorbent material, said absorbent structure having a basis weight in the range of about 150 to about 400 grams per square meter and a density in the range of about 0.05 to about 0.13 grams per cubic centimeter, said absorbent structure having a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test of at least about 15 grams/gram and a retention capacity as determined by said Saturation Capacity and Retention Capacity Test of at least about 3 grams/gram.

The absorbent structure construction of the article recited in claim 24 provides a combination of features that achieve good

saturation and retention capacity of the absorbent structure while still allowing for a good fluid intake rate of the structure - something that had not been achieved with prior articles. In the past, absorbent articles incorporated absorbent structures that could deliver either a good fluid intake rate or provide for an acceptable fluid capacity, but not both. For example, referring to the data in Table 12 of the present application, as the saturation capacity and more particularly the retention capacity of the absorbent structure increases, the intake time for a first insult and even more so for a second insult gets worse. While the saturation and/or retention capacity of the absorbent structure could be maximized (e.g., further increased) by changing the construction of the absorbent structure, doing so would further undesirably worsen the intake performance.

Claim 24 is submitted to be non-obvious in view of and patentable over the references of record, and in particular the cited references, in that whether considered alone or in combination the references fail to disclose or suggest an absorbent article having an absorbent structure that is 1) sized and configured for insertion at least partially within the vestibule of the female wearer, 2) comprised of 5 to 15 weight percent superabsorbent material and 3) has the recited basis weight, density, retention capacity and saturation capacity. For example, the superabsorbent material concentration in the recited range provides for improved intake times during use of the absorbent article while still providing the recited saturation and retention capacities. See, for example, codes 8 and 10 of Fig. 12 of the present application.

During prosecution of the present application a disagreement arose as to whether the superabsorbent material concentration and performance characteristics recited in claim

24 are structure or functional recitations. However, in view of the remarks made by appellants in their Response to Final Office Action dated March 12, 2007 and the subsequent Advisory action received from the Examiner, it appears that any needed distinction is moot at this point. That is, appellants and the Examiner appear to now agree that the recitations are entitled to patentable weight irrespective of whether the recitations are considered functional or structural. However, in the event that such an issue still bears on the patentability of claim 24 (as well as the other claims, the Board is respectfully directed to the remarks provided in the Response to Final Office Action dated March 12, 2007.

Bewick (see paragraph 0114 thereof) discloses a superabsorbent fiber concentration in the range of 25-100 percent, and in a particularly preferred embodiment it is 70 percent. The Examples of Bewick each disclose an absorbent core having a superabsorbent concentration of 50 percent. Thus, Bewick clearly fails to teach a superabsorbent material concentration in the range of about 5 to about 15 percent as recited in claim 24.

Bewick thus clearly teaches using a substantially greater superabsorbent material concentration (i.e., greater than the 5-15 percent recited in claim 24). As admitted by the Examiner, increasing the superabsorbent concentration increases the absorbent capacity (e.g., the retention capacity as recited in claim 24) of the absorbent core. See page 4, second full paragraph of the final Office action. It is also true that decreasing the superabsorbent concentration will decrease the absorbent capacity of the absorbent core. However, Bewick specifically teaches the desirability of a high capacity absorbent core. See, e.g., paragraphs [0114 and 0115]. Where a proposed modification of the prior art would render the prior

being modified unsatisfactory for its intended purpose, or change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims obvious. See In Re Gordon, 221 USPQ 1125 (Fed. Cir. 1994); In re Ratti, 123 USPQ 349 (CCPA 1959); MPEP 2143.01(V and VI). Lowering the superabsorbent concentration specified by Bewick for its high capacity absorbent core to the range called out in claim 24 would certainly reduce the absorbent capacity (i.e., retention capacity) of the core, which violates the principles taught by Bewick and would render the absorbent core 44 thereof unsatisfactory for its intended purpose, which is high capacity absorbence. For these reasons alone, one skilled in the art would not have found it obvious to modify Bewick to have the superabsorbent concentration recited in claim 24.

Also, the only data provided by Bewick regarding the absorbency provided by the superabsorbent material is the data in Fig. 23 thereof for Examples 2-5 wherein the HGW Capacity is identified as 7.3 grams. This data was obtained at a superabsorbent material concentration of 50 percent. There is no disclosure by Bewick, however, as to what happens to the absorbent capacity (i.e., retention capacity) as the superabsorbent material concentration goes down to 25 percent, let alone below 25 percent or even in the range of 5-15 percent as recited in claim 24. That is, the retention saturation capacity of the Bewick structure should the superabsorbent concentration be lowered to a range of 5-15 percent is not a predictable result, let alone is it predictable that the retention capacity will still be above the 3 grams/gram recited in claim 24. Thus, there is no reason that one skilled in the art would believe, based on the disclosure of Bewick, that the saturation capacity and/or the retention capacity would remain

in the range recited in claim 24 if the superabsorbent material concentration was reduced from 50 percent down to about 5 to about 15 percent as recited in claim 24. Indeed, based on the express teachings of Bewick that the superabsorbent material concentration should be above 25 percent, one skilled in the art would not be inclined to do so.

It also would not have been obvious to one skilled in the art to modify the absorbent core of Bewick to have the recited saturation capacity and the recited retention capacity, particularly while lowering the superabsorbent concentration to that recited in claim 24. In this regard, the Office cites Dulle (column 2, lines 37-59) for allegedly teaching that "maximizing saturation capacity of an absorbent article aids in preventing the article from exceeding that capacity, beyond which it can not absorb more fluid;" and Brandt (column 1, lines 38-55) for allegedly teaching that "maximizing the total fluid capacity of an absorbent article is desirable." Appellants submit that the cited reference passages do not support the Office's position regarding optimization. Dulle is directed to the macroscopic or overall geometry of foam tampons and construction techniques for making such foam tampons. The cited passage (column 2, lines 37-59) reads as follows:

Catamenial tampons are subject to four distinct kinds of failure: bypass, partitioning, compression, and exceeding saturation capacity. Bypass failure occurs when the menses travels the length of the vagina without contacting the tampon, i.e., the tampon fails to intercept the flowing menses. This generally occurs because the tampon does not fill the cross section of the vagina. Partitioning failure occurs when the menses flow rate past a particular area of the tampon is greater than the absorption rate into the tampon in that area. Thus, although some of the menses is absorbed, that flow which is greater than the absorption rate into the tampon proceeds past the tampon and out the introitus. This partitioning occurs many times because the tampon surface is blocked by mucus secretions, clotted

blood, or endometrial debris. Compressive failure occurs when the user inadvertently brings pressure to bear on a tampon which has absorbed menses, and this pressure is great enough to "squeeze" the menses from the tampon. Exceeding the saturated capacity occurs when the tampon has absorbed all the fluid it can, and for every drop added thereafter, another drop must leave the tampon.

Appellants submit that nothing in that passage, which teaches the various manners in which tampons fail, suggests that saturation capacity be maximized (or even optimized for that matter). Nor does Dulle teach anywhere therein that the foam materials used to make the tampons disclosed by Dulle are intended to "maximize" saturation capacity.

Although Brandt is more germane to the present invention than Dulle in that Brandt is directed to the composition of an absorbent layer for use, e.g., in diapers, sanitary napkins, etc., the cited passage (column 1, lines 38-55) reads as follows:

Frequently hydrogel-forming absorbent materials comprise polymers of polymerizable unsaturated carboxylic acids or derivatives thereof, such as acrylic acid and/or alkali metal and alkyl acrylates. These polymers are rendered water-insoluble by cross-linking the carboxyl group-containing polymer chains using conventional cross-linking agents such as di- or poly-functional monomer materials. The degree of cross-linking in hydrogel and hydrogel-forming materials not only determines their water-solubility but is also an important factor in establishing two other characteristics of fluid absorbing hydrogels, i.e., absorbent capacity and gel strength. Absorbent capacity of "gel volume" is a measure of the amount of water or body fluid which a given amount of hydrogel-forming material will absorb. Gel strength relates to the tendency [of] or the hydrogel formed from such material to deform or "flow" under an applied stress.

While this passage teaches the desirability of providing a superabsorbent material having an increased absorbent capacity,

there is no teaching whatsoever by Brandt that it is desirable to maximize (or even optimize) the retention capacity of an absorbent structure made from this superabsorbent material.

Most notably, the absorbent article recited in claim 24 (and the other claims of the present application, for that matter), and more particularly the absorbent structure therein, is not constructed to maximize each of the various "test vectors" as the Office asserts would be obvious. Rather, as discussed previously, the criticality of the combination of the recited superabsorbent material concentration, saturation capacity and retention capacity that this combination provides good (but not maximized) saturation and retention capacity while still allowing for a good fluid intake rate - something that had not been achieved with prior products. While the saturation and/or retention capacity of the absorbent structure could be maximized as the Office seems to suggest is the goal of one skilled in the art based on Dulle and Brandt, doing so would further undesirably worsen the intake performance. Thus, the construction of the absorbent structure recited in claim 24 does not "maximize" saturation capacity and retention capacity but rather balances it with the need for improved intake performance. Indeed, one skilled in the art reading Dulle and Brandt would, at best, conclude that the superabsorbent concentration in the core 44 of Bewick should be maximized, i.e., approach 100 percent, to maximize saturation capacity and retention capacity.

Appellants structure as recited in claim 24 is quite the opposite. Indeed, intake performance is clearly not a concern considered or even recognized by Bewick. Accordingly, one skilled in the art would not have been motivated by Dulle and Brandt to modify Bewick to sacrifice saturation capacity and/or retention capacity for the sake of improved intake performance.

To this end, the Office still relies on Zelazoski as teaching the desirability of minimizing intake and rewet properties. However, Zelazoski clearly render this teaching only with respect to body-side liner material and not to absorbent structures, particularly absorbent structures that contain superabsorbent material. See, e.g., column 3, lines 30-45. There is clearly no teaching or even a suggestion for minimizing the intake and rewet performance of an absorbent structure, and in particular an absorbent structure such as that recited in claim 24 as comprising superabsorbent material. The final Office action (at page 10 thereof) and Advisory action now take the position that Zelazoski discloses the desirability of minimizing the intake and rewet properties of absorbent articles or materials generally. There is no evidence, either cited in the final Office action, the Advisory action or in Zelazoski itself, to permit such an extrapolation of the teachings of Zelazoski.

Rather, the teachings of Zelazoski are directed solely to the particular construction of the bodyside liner and its effect on intake and rewet performance. At best, one skilled in the art reading Zelazoski would be motivated to modify Bewick to use the bodyside liner of Zeloski in place of the liner used by Bewick. This not render predictable the intake and rewet performance of the absorbent core 44 of Bewick were in modified in the same manner as the liner material of Zelazoski.

Moreover, appellants again note that the absorbent structure recited in claim 24 is not intended to "minimize" intake performance. See, e.g., the Table of Fig. 12 again in which the intake times for the control samples (1-5) were, on the whole, much less than the intake times for the absorbent structures (6-11) according to the present invention.

One skilled in the art would not have found it obvious in view of Zelazoski to sacrifice intake and rewet performance to assure better saturation and retention capacity performance.

For all of the above reasons, appellants respectfully submit that claim 24 is non-obvious in view of and patentable over the cited references.

Claims 25, 28-40 and new claims 60-62 depend directly or indirectly from claim 24 and are submitted to be patentable over the references of record for the same reasons as claim 24.

Claim 41

Claim 41 also stands also rejected under 35 U.S.C. § 103(a) as being obvious in view of Bewick-Sonntag et al. (U.S. 2003/0191442 A1) in combination with Dulle, Zelazoski et al. and Brandt et al. Claim 41 is submitted to be non-obvious in view of and patentable over the above references as well as the other references of record in that whether considered alone or in combination the references fail to disclose or suggest an absorbent article having an absorbent structure that is 1) sized and configured for insertion at least partially within the vestibule of the female wearer, 2) comprises in the range of about 5 weight percent to about 35 weight percent superabsorbent material, 3) has a basis weight in the range of about 150 to about 400 grams per square meter and a density in the range of about 0.05 to about 0.13 grams per cubic centimeter, and 4) has an intake time for a first insult of said absorbent structure as determined by an Intake and Rewet Test of no more than about 30 seconds.

Bewick fails to expressly or inherently disclose an intake time for a first insult of said absorbent structure as determined by an Intake and Rewet Test of no more than about 30 seconds. Moreover, there is no suggestion found anywhere in

Bewick (nor has the Examiner asserted otherwise) for modifying the absorbent core thereof to have the recited intake time.

Rather, the Office's position with respect to claim 41 (as best understood by appellants) is that it would have been obvious in view of the teachings of Zelazoski to minimize intake time.

However, Zelazoski is specifically directed to a bodyside liner material that has an improved intake time and rewet. See, e.g., column 8, lines 17-20 at which Zelazoski disclose the basis weight of the liner being about 14 to about 75 gsm (compare this to the basis weight of the absorbent structure recited in claim 41 as being at least twice that of Zelazoski). Thus, the teachings of Zelazoski are limited entirely to the construction and operation of the topsheet. There is no predictability provided by the teachings of Zelazoski as to the relationship between a high absorbent capacity absorbent structure such as that of Bewick and intake time (or intake rate) of the absorbent structure. Rather, at the most one skilled in the art may be motivated by Zelazoski to modify the topsheet (i.e., liner) of Bewick in the manner disclosed by Zelazoski. However, such a teaching does not amount to a teaching that intake time is a result-effective variable for an absorbent core and would not motivate one skilled in the art to modify the absorbent core of Bewick to provide the intake time recited in claim 41.

Moreover, appellants note that the absorbent structure recited in claim 24 is not intended to "minimize" intake performance. See, e.g., the Table of Fig. 12 again in which the intake times for the control samples (1-5) were, on the whole, much less than the intake times for the absorbent structures (6-11) according to the present invention.

For these reasons, claim 41 is submitted to be non-obvious in view of and patentable over the cited references.

Claims 44-55 and 63 depend directly or indirectly from claim 41 and are submitted to be patentable over the references of record for the same reasons as claim 41.

2. Claims 1, 3, 4, 6-16, 18-23, 34, 35, 49, 50 and 56-59 are non-obvious in view of and patentable over Bewick-Sonntag et al. (US 2003/0191442) in combination with Dulle (US 3,856,013), Zelazoski et al. (US 5,536,555) and Brandt et al. (US Re. 32,649) and further in combination with Bewick-Sonntag et l. (US 5,836,929).

Claim 1

Claim 1 is directed to an absorbent article for disposition at least partially within the vestibule of a female wearer, and comprises:

a liquid permeable liner adapted for contiguous relationship with the wearer;

an outer cover in generally superposed relationship with the liner; and

an absorbent structure formed separate from the liner and the outer cover and being disposed therebetween, said absorbent structure being sized and configured for insertion at least partially within the vestibule of the female wearer, said absorbent structure being constructed at least in part of hydrophilic fibers and superabsorbent material, a concentration of the superabsorbent material in the absorbent structure being in the range of about 5 weight percent to about 35 weight percent, said superabsorbent material having a gel stiffness index of at least about 0.5, said absorbent structure having a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test of at least about 15 grams/gram, a

retention capacity as determined by said Saturation Capacity and Retention Capacity Test of at least about 3 grams/gram, and an intake time for a first insult of said absorbent structure as determined by an Intake and Rewet Test of no more than about 30 seconds.

Claim 1 is submitted to be non-obvious in view of and patentable over the references of record, and in particular US 2003/091442 (Bewick-Sonntag et al., referenced further herein as Bewick) in combination with U.S. Patent No. 5,836,929 (Bewick-Sonntag et al., referenced further herein as the '929 reference), in that whether considered alone or in combination the references fail to disclose or otherwise suggest an absorbent article comprised of an absorbent structure that is sized and configured for insertion at least partially within the vestibule of the female wearer, is constructed at least in part of hydrophilic fibers and superabsorbent material, with the superabsorbent material being in the recited concentration and having the recited gel stiffness index, and wherein the absorbent structure has the recited combination of saturation capacity, retention capacity and intake time.

Bewick discloses an absorbent device having a topsheet for contacting hydrous body tissues. In particular, as illustrated in Figs. 4 and 5, the absorbent device is an interlabial pad 20 composed of three key elements: 1) a highly adaptable absorbent structure able to macroscopically adapt to a unique anatomical shape, 2) a microscopically structured absorbent core/topsheet, and 3) a robust application/insertion design feature. See paragraphs [0016 - 0019]. With particular reference to paragraphs [0110 - 0122], the absorbent core 44 is positioned between a topsheet 42 and back sheet 38 and provides the means for absorbing exudates such as menses.

According to Bewick, the absorbent core 44 in one embodiment is a fibrous batt, such as of rayon or a rayon/cotton blend. Paragraph [0113]. In other embodiments, the absorbent core 44 can comprise fibrous superabsorbent material in a concentration in the range of 25% to 100% and in particularly preferred embodiments a concentration above 70%. Paragraph [0114]. In one particular example, the superabsorbent fiber is FIBERDRI type 1162 superabsorbent fibers from Camelot Technologies Ltd. Of Alberta, Canada. Paragraphs [0119 and 0120]. In the working examples 2-5 described by Bewick, the absorbent core 44 comprised 50% of the FIBERDRI type 1162 superabsorbent fibers.

At paragraphs [0309 and 0310], Bewick describes an absorbent capacity test that is comparable to the retention capacity portion of the Saturation Capacity and Retention Capacity Test recited in claim 1 and described in the present application. Figure 23 of Bewick indicates that the absorbent capacity of the working Examples 2-5 of Bewick have an absorbent capacity of 7.3 grams (for an absorbent core that weighs approximately 1.3 grams (based on the information provided for Examples 2-5), which appears to meet the recited retention capacity set forth in claim 1 of at least 3 grams/gram. The superabsorbent concentration for these Examples was 50 percent. See paragraph [0164].

Bewick fails, however, to expressly disclose the combination of a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test of at least about 15 grams/gram, a retention capacity as determined by said Saturation Capacity and Retention Capacity Test of at least about 3 grams/gram, and an intake time for a first insult of said absorbent structure as determined by an Intake and Rewet Test of no more than about 30 seconds. In particular, Bewick

fail to disclose, expressly or inherently, the recited saturation capacity and intake time. Moreover, there is no suggestion found anywhere in Bewick for modifying the absorbent core thereof to have the recited combination of retention capacity, saturation capacity and intake time. The '929 reference also fails to show or suggest such features (nor does the Office action contend otherwise).

Rather, the final Office action asserts that the benefits of optimizing saturation capacity, retention capacity, intake time, and rewet (with respect to dependent claims 22 and 23) would have been known, such that those are result-effective variables. Accordingly, reference is made to the rejection under Bewick, Dulle, Brandt, and Zelazoski to support the rejection. Because the Office relies on essentially the same logic to support the rejection as addressed above in connection with claim 24, Appellants traverse the rejection of these claims for the same reasons set forth above.

For example, Zelazoski as previously noted is specifically directed to a bodyside liner material that has an improved intake time and rewet. Thus, the teachings of Zelazoski are limited entirely to the construction and operation of the liner. There is no teaching or suggestion of the relationship between an absorbent structure such as that of Bewick and intake time (or intake rate) of the absorbent structure. Rather, at most one skilled in the art would find it obvious to modify the topsheet (i.e., liner) of Bewick in the manner disclosed by Zelazoski. However, such a teaching does not amount to a teaching that intake time is a result-effective variable for an absorbent core (not a liner, which is much thinner and generally of different materials than an absorbent core).

Moreover, appellants note that the absorbent structure recited in claim 1 is not intended to "minimize" intake

performance. See, e.g., the Table of Fig. 12 again in which the intake times for the control samples (1-5) were, on the whole, much less than the intake times for the absorbent structures (6-11) according to the present invention. Nor is the absorbent structure recited in claim 1 intended to "maximize" saturation capacity and/or retention capacity as discussed above.

For these reasons, claim 1 is submitted to be non-obvious in view of and patentable over the references of record.

Claims 3, 4, 6-16, 18-23 and 56-59 depend directly or indirectly from claim 1 and are submitted to be patentable over the cited references for the same reasons as claim 1.

VIII. CONCLUSION

For the reasons stated above, appellants respectfully request that the Office's rejections be reversed and that claims 1, 3, 4, 6-16, 18-25, 28-41 and 44-63 be allowed.

While no fee is believed due at this time, the Commissioner is authorized to charge any fee due to Deposit Account No. 19-1345 in the name of Senniger, Powers.

Respectfully submitted,

/Richard L. Bridge/

Richard L. Bridge, Reg. No. 40,529
SENNIGER POWERS
One Metropolitan Square, 16th Floor
St. Louis, Missouri 63102
(314) 231-5400

RLB/PEB/bcw

CLAIMS APPENDIX

1. An absorbent article for disposition at least partially within the vestibule of a female wearer, said absorbent article comprising:

 a liquid permeable liner adapted for contiguous relationship with the wearer;

 an outer cover in generally superposed relationship with the liner; and

 an absorbent structure formed separate from the liner and the outer cover and being disposed therebetween, said absorbent structure being sized and configured for insertion at least partially within the vestibule of the female wearer, said absorbent structure being constructed at least in part of hydrophilic fibers and superabsorbent material, a concentration of the superabsorbent material in the absorbent structure being in the range of about 5 weight percent to about 35 weight percent, said superabsorbent material having a gel stiffness index of at least about 0.5, said absorbent structure having a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test of at least about 15 grams/gram, a retention capacity as determined by said Saturation Capacity and Retention Capacity Test of at least about 3 grams/gram, and an intake time for a first insult of said absorbent structure as

determined by an Intake and Rewet Test of no more than about 30 seconds.

3. The absorbent article set forth in claim 1 wherein the absorbent structure comprises in the range of about 15 weight percent to about 35 weight percent superabsorbent material.

4. The absorbent article set forth in claim 3 wherein the absorbent structure comprises in the range of about 15 weight percent to about 25 weight percent superabsorbent material.

5. The absorbent article set forth in claim 1 wherein the superabsorbent material has a gel stiffness index of at least about 0.6.

7. The absorbent article set forth in claim 1 wherein the retention capacity of the absorbent structure as determined by the Saturation Capacity and Retention Capacity Test is at least about 4 grams/gram.

8. The absorbent article set forth in claim 1 wherein the absorbent structure has a density in the range of about 0.05 grams/cubic centimeters to about 0.13 grams/cubic centimeters.

9. The absorbent article set forth in claim 8 wherein the absorbent structure has a density in the range of about 0.08 grams/cubic centimeters to about 0.13 grams/cubic centimeters.

10. The absorbent article set forth in claim 9 wherein the absorbent structure has a density in the range of about 0.08 grams/cubic centimeters to about 0.11 grams/cubic centimeters.

11. The absorbent article set forth in claim 1 wherein absorbent structure has a maximum length in the range of about 60 to about 100 millimeters and a maximum width in the range of about 40 to about 70 millimeters.

12. The absorbent article set forth in claim 1 wherein the absorbent structure has a thickness in the range of about 1 to about 8 millimeters.

13. The absorbent article set forth in claim 12 wherein the absorbent structure has a thickness in the range of about 1 to about 5 millimeters.

14. The absorbent article set forth in claim 13 wherein the absorbent structure has a thickness in the range of about 2 to about 3 millimeters.

15. The absorbent article set forth in claim 1 wherein the absorbent structure has a basis weight in the range of about 150 to about 400 grams per square meter.

16. The absorbent article set forth in claim 15 wherein the absorbent structure has a basis weight in the range of about 200 to about 350 grams per square meter.

18. The absorbent article set forth in claim 1 wherein the absorbent article has a predetermined axis of flexure extending generally longitudinally of said article, the absorbent structure being foldable on said predetermined axis of flexure.

19. The absorbent article set forth in claim 1 wherein the absorbent structure comprises a mixture of superabsorbent material and hydrophilic fibers.

20. The absorbent article set forth in claim 19 wherein the mixture of superabsorbent material and hydrophilic fibers is a generally homogeneous mixture.

21. The absorbent article set forth in claim 1 wherein the absorbent structure is of unitary construction.

22. The absorbent article set forth in claim 1 wherein the absorbent structure further has a rewet as determined by the Intake and Rewet Test of less than or equal to about 1 gram.

23. The absorbent article set forth in claim 22 wherein the absorbent structure has a rewet as determined by the Intake and Rewet Test of less than or equal to about 0.7 grams.

24. An absorbent article for disposition at least partially within the vestibule of a female wearer, said absorbent article comprising:

an absorbent structure sized and configured for insertion at least partially within the vestibule of the female wearer, said absorbent structure comprising in the range of about 5 weight percent to about 15 weight percent superabsorbent material, said absorbent structure having a basis weight in the range of about 150 to about 400 grams per square meter and a density in the range of about 0.05 to about 0.13 grams per cubic centimeter, said absorbent structure having a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test of at least about 15 grams/gram and a retention capacity as determined by said Saturation Capacity and Retention Capacity Test of at least about 3 grams/gram.

25. The absorbent article set forth in claim 24 wherein the retention capacity of the absorbent structure as determined by the Saturation Capacity and Retention Capacity Test is at least about 4 grams/gram.

28. The absorbent article set forth in claim 24 wherein the absorbent structure has a density in the range of about 0.08 grams/cubic centimeters to about 0.13 grams/cubic centimeters.

29. The absorbent article set forth in claim 28 wherein the absorbent structure has a density in the range of about 0.08 grams/cubic centimeters to about 0.11 grams/cubic centimeters.

30. The absorbent article set forth in claim 24 wherein the absorbent structure has an intake time for a first insult of said absorbent structure as determined by an Intake and Rewet Test of no more than about 30 seconds.

31. The absorbent article set forth in claim 24 wherein absorbent structure has a maximum length in the range of about 60 to about 100 millimeters and a maximum width in the range of about 40 to about 70 millimeters.

32. The absorbent article set forth in claim 24 further comprising a liquid permeable liner adapted for contiguous relationship with the wearer, and an outer cover in generally superposed relationship with the liner, the absorbent structure being disposed between the liner and the outer cover.

33. The absorbent article set forth in claim 24 wherein the absorbent article has a predetermined axis of flexure extending generally longitudinally of said article, the absorbent structure being foldable on said predetermined axis of flexure.

34. The absorbent article set forth in claim 24 wherein the absorbent structure comprises a mixture of superabsorbent material and hydrophilic fibers.

35. The absorbent article set forth in claim 34 wherein the mixture of superabsorbent material and hydrophilic fibers is a generally homogeneous mixture.

36. The absorbent article set forth in claim 24 wherein the absorbent structure is of unitary construction.

37. The absorbent article set forth in claim 24 wherein the superabsorbent material has a gel stiffness index of at least about 0.5.

38. The absorbent article set forth in claim 37 wherein the superabsorbent material has a gel stiffness index of at least about 0.6.

39. The absorbent article set forth in claim 24 wherein the absorbent structure further has a rewet as determined by the Intake and Rewet Test of less than or equal to about 1 gram.

40. The absorbent article set forth in claim 39 wherein the absorbent structure has a rewet as determined by the Intake and Rewet Test of less than or equal to about 0.7 grams.

41. An absorbent article for disposition at least partially within the vestibule of a female wearer, said absorbent article comprising:

an absorbent structure sized and configured for insertion at least partially within the vestibule of the female wearer, said absorbent structure comprising in the range of about 5 weight percent to about 35 weight percent superabsorbent material, said absorbent structure having a basis weight in the

range of about 150 to about 400 grams per square meter and a density in the range of about 0.05 to about 0.13 grams per cubic centimeter, said absorbent structure having an intake time for a first insult of said absorbent structure as determined by an Intake and Rewet Test of no more than about 30 seconds.

44. The absorbent article set forth in claim 41 wherein the absorbent structure has a density in the range of about 0.08 grams/cubic centimeters to about 0.13 grams/cubic centimeters.

45. The absorbent article set forth in claim 44 wherein the absorbent structure has a density in the range of about 0.08 grams/cubic centimeters to about 0.11 grams/cubic centimeters.

46. The absorbent article set forth in claim 41 wherein absorbent structure has a maximum length in the range of about 60 to about 100 millimeters and a maximum width in the range of about 40 to about 70 millimeters.

47. The absorbent article set forth in claim 41 further comprising a liquid permeable liner adapted for contiguous relationship with the wearer, and an outer cover in generally superposed relationship with the liner, the absorbent structure being disposed between the liner and the outer cover.

48. The absorbent article set forth in claim 41 wherein the absorbent article has a predetermined axis of flexure extending generally longitudinally of said article, the absorbent structure being foldable on said predetermined axis of flexure.

49. The absorbent article set forth in claim 41 wherein the absorbent structure comprises a mixture of superabsorbent material and hydrophilic fibers.

50. The absorbent article set forth in claim 49 wherein the mixture of superabsorbent material and hydrophilic fibers is a generally homogeneous mixture.

51. The absorbent article set forth in claim 41 wherein the absorbent structure is of unitary construction.

52. The absorbent article set forth in claim 41 wherein the superabsorbent material has a gel stiffness index of at least about 0.5.

53. The absorbent article set forth in claim 52 wherein the superabsorbent material has a gel stiffness index of at least about 0.6.

54. The absorbent article set forth in claim 41 wherein the absorbent structure further has a rewet as determined by the Intake and Rewet Test of less than or equal to about 1 gram.

55. The absorbent article set forth in claim 54 wherein the absorbent structure has a rewet as determined by the Intake and Rewet Test of less than or equal to about 0.7 grams.

56. The absorbent article set forth in claim 1 wherein the absorbent structure has a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test in the range of about 15 grams/gram to about 30 grams/gram.

57. The absorbent article set forth in claim 1 wherein the absorbent structure has a retention capacity as determined by a Saturation Capacity and Retention Capacity Test in the range of about 3.9 grams/gram to about 7.6 grams/gram.

58. The absorbent article set forth in claim 1 wherein the absorbent structure has an intake time for a first insult of said absorbent structure as determined by an Intake and Rewet Test of greater than or equal to about 15 seconds.

59. The absorbent article set forth in claim 1 wherein the absorbent structure has a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test in the range of about 15 grams/gram to about 30 grams/gram, a retention capacity as determined by a Saturation Capacity and Retention Capacity Test in the range of about 3.9 grams/gram to about 7.6 grams/gram, and an intake time for a first insult of said absorbent structure as determined by an Intake and Rewet Test of greater than or equal to about 15 seconds.

60. The absorbent article set forth in claim 24 wherein the absorbent structure has a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test in the range of about 15 grams/gram to about 30 grams/gram.

61. The absorbent article set forth in claim 24 wherein the absorbent structure has a retention capacity as determined by a Saturation Capacity and Retention Capacity Test in the range of about 3.9 grams/gram to about 7.6 grams/gram.

62. The absorbent article set forth in claim 24 wherein the absorbent structure has a saturation capacity as determined by a Saturation Capacity and Retention Capacity Test in the range of about 15 grams/gram to about 30 grams/gram, and a retention

capacity as determined by a Saturation Capacity and Retention Capacity Test in the range of about 3.9 grams/gram to about 7.6 grams/gram.

63. The absorbent article set forth in claim 41 wherein the absorbent structure has an intake time for a first insult of said absorbent structure as determined by an Intake and Rewet Test of greater than or equal to about 15 seconds.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.